

First, I would like to state that I am an Amateur Radio Operator and also an electrical design technician. I have been involved in the field of radio frequency (RF) communications for over ten years professionally and for over 40 years as a hobby. I am trained as both an emergency communications operator and a severe weather spotter for the Skywarn organization.

Second, like numerous other ham radio operators, I am very troubled by the recent events surrounding the deployment of Broadband Over Powerline (BPL) services throughout the nation.

While I am in favor of advances in technology, I am also extremely concerned with the lack of testing which has preceded the authorization and allowed deployment of BPL systems. Independent testing by the ARRL and the NTIA have resulted in data exhibiting extreme interference being radiated within the RF Spectrum in use by federally licensed services. This renders the presently licensed communication services inoperable. We are supposed to be strengthening our emergency preparedness not weakening it. In times of emergencies agencies such as FEMA, the Red Cross and Radio Amateur Emergency Communications Services rely upon the use of the radio spectrum being encroached upon by BPL services. With the advent of interference due to BPL, crucial communication links will be lost. Even communications aboard Air Force One can be interfered with.

BPL is legally required by FCC rules to cease operation if found to be interfering with Licensed services. The stance has been taken which places the burden of proving the identity of the interfering source upon the licensee being interfered with and allows the FCC to ignore the standard complaint process. By the FCC not being responsible for tracking down the source of the interference itself, it appears that they are, in effect, proclaiming a hands-off order.

The RF spectrum has been regulated both internationally and nationally for decades. The spectrum map has evolved as technology has changed. Licensed services have been required to relocate to accommodate for or share usage of the RF spectrum with new technology users. BPL is a technology which is an example of inefficient usage of the RF spectrum. It is a technology which requires wires to transfer RF energy which is typically a wireless medium. The wires used for the transmission of RF data were not designed for this purpose.

The argument of the need for BPL to allow for high speed internet connections to be made available for all citizens has been a monetarily driven quick fix with total disregard for the consequences resulting from that approach. While power lines are typically provided throughout the nation, there are still locations that have no electrical power. It is also true that power does not have to be provided to subscribers that do not pay for the service.

Furthermore, the argument that portrays BPL as a cheaper high speed internet source is false. Cable, DSL and dial-up services are available at either the same or cheaper rates. This seems to be a more economical connection source to those who cannot afford the costlier high speed connections presently available.

**Internet access is a chosen resource not a government mandated one.** It is the responsibility of each individual to choose and pay for this service if so desired. The current administrations position on the development and accelerated deployment of the BPL service is questionable to say the least. Why does the administration feel that a technology which has been found to be disruptive to the high frequency RF spectrum within other countries, notably Japan and Austria, but state those disruptions will not cause the same interference within the United States of America? The argument from BPL advocates stating the technology is now more advanced and will not cause the same interference problems as seen in those countries is false. The infrastructure of BPL internet communications still relies upon power lines to transfer data using the R.F. Spectrum. The laws of Physics apply universally throughout the world. The United States of America, no matter how great it is, is not immune to the laws of Physics which dictate propagation of radio waves.

Choosing BPL is not a good source of our resources and will be disastrous to high frequency radio communications and will therefore hurt this country. In this time of need for increased security, BPL will only hurt it in times of emergencies when normal communications sytems have been rendered inoperable and agencies such as FEMA and local amateur radio operators which use the high frequency radio spectrum for emergency communications operations are to find that there is too much interference to make vital communications possible due to noise created by BPL systems.

I urge that you along with the current administration ensure that BPL systems are required to adhere to the strict regulations set forth by the FCC dictating that no harmful interference to licensed services may be caused by these systems and in the event that there is interference, the operation shall cease immediately until remedied. Thank you.

Sincerely,

Thomas Bredemus  
411 Bucher Ave.  
Shoreview, MN 55126

kc0inp@hotmail.com